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**PATENT APPLICATION**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Takeshi TAKEZAWA

Group Art Unit: 2875

Application No.: 10/798,448

Examiner: A. REHM

Filed: March 12, 2004

Docket No.: 119082

For: ILLUMINATION DEVICE AND PROJECTOR EQUIPPING THE SAME

**REQUEST FOR RECONSIDERATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In reply to the June 30, 2006 Office Action, reconsideration of this application is respectfully requested in light of the following remarks.

Claims 1-24 are pending in this application. The Office Action, in paragraph 1, rejects claim 11 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Publication No. 2005/0024880 to Moench et al. (hereinafter "Moench"). The Applicant respectfully traverses this rejection.

The Office Action asserts that Moench teaches an end part of at least one said pair of electrodes being held in touch with an inner surface of a light emitting tube in finding features disclosed in Moench to correspond to the features recited in claim 11. This assertion is incorrect.

The Office Action relies on Fig. 1 of Moench as illustrating electrodes within tube 2 supported by a surface therein. However, Fig. 1 of Moench is simply a partial diagram of a longitudinal sectional view of an illumination unit. The diagram does not provide sufficient

detail to ascertain the method of attachment of the individual electrodes (22 and 23), nor does it provide adequate detail to determine the positions of the individual electrodes (22 and 23) with respect to the inner wall of the light tube. The disclosure of Moench is silent regarding the placement of the electrodes with respect to the inner surface of the glass bulb. Therefore, Applicant submits that the Examiner's assertion that Fig. 1 illustrates electrodes within tube 2 supported by a surface therein, is merely conclusory, and is not supported in the disclosure, or depictions in the Figures, of Moench.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed.Cir. 1987). Applicant respectfully submits that the Office Action fails to support a *prima facie* case of anticipation as set forth by the precedent identified above.

For at least the above reason, Moench cannot reasonably be considered to teach, or to have suggested, the combination of all of the features recited in independent claim 11.

Accordingly, reconsideration and withdrawal of the rejection of claim 11 under 35 U.S.C. §102(e) as being anticipated by Moench are respectfully requested.

The Office Action, in paragraph 2, rejects claims 1-6, 9, 10, 12-18 and 21-24 under 35 U.S.C. §103(a) as being unpatentable over Moench and U.S. Patent No. 6,734,628 to Seki et al. (hereinafter "Seki"). Based on the comments in paragraph 2, the Applicant believes that the identified reference of Seki is a typographical error, and should instead identify U.S. Patent No. 6,784,601 to Kai et al. (hereinafter "Kai"). Applicant's belief in this regard, is based on the narrative referring to the Kai reference, and further, the specific identification of Fig. 1, and col. 3, lines 55 - col. 4, line 10, corresponding to the Kai reference. Applicant's response is made based on the 35 U.S.C. §103(a) rejection over Moench and Kai. The Applicant respectfully traverses this rejection.

The Office Action asserts that Moench teaches many of the features recited in the rejected claims, as enumerated above. However, the Office Action concedes that Moench does not teach an electrode shaft that is longer/thicker or has a thicker wall on a front side than a rear side electrode shaft. The Office Action relies on Kai to overcome the above-stated deficiencies of Moench.

The Office Action asserts that Kai teaches a front-end sealed portion/electrode shaft that is longer than that of the corresponding rear-side portion. This assertion is incorrect. Kai actually teaches that by adjusting the length of the sealed portions, the temperature of the front-end of the sealed portion on the side of the transparent member can be restricted to a low temperature (col. 4, lines 36-44). However, as illustrated in Fig. 1, by increasing the length of the sealed portion (23), the shaft length of the electrode (25) is not increased. The metal foil (27) is lengthened to correspond to the lengthened seal portion. For at least this disclosure, Kai cannot reasonably be considered to teach, or to have suggested, that an electrode shaft which supports the front-side electrode of the pair of electrodes that is surrounded with the second reflector is made thicker and/or longer than an electrode shaft which supports the rear-side electrode, as is positively recited in claims 3 and 15.

Kai does not teach, nor would it have suggested, features from independent claims 1, 5, 9, 12, 13, 17, 21 and 24. These features include: (1) a heat capacity of the front-side electrode of the pair of electrodes that is surrounded with a second reflector, being made larger than a heat capacity of the rear-side electrode, as is positively recited in claims 1 and 13; (2) the sealing portion located on the front-side being made thicker than the sealing portion located on the rear-side, as is positively recited in claims 5 and 17; (3) a wall thickness of the front-side of the light emitting portion of the light emitting tube which is surrounded with the second reflector being made greater than a wall thickness of a rear-side of the light emitting portion, as is positively recited in claims 9 and 21; and (4) heat capacity

of the heat conduction part of the front-side electrode of the pair of electrodes that is surrounded with the second reflector being made larger than a heat capacity of the heat conduction part of the rear-side electrode, as is positively recited in claims 12 and 24.

For at least the above reasons, any permissible combination of Moench and Kai cannot reasonably be considered to teach, or to have suggested, the combinations of all of the features recited in at least independent claims 1, 3, 5, 9, 12, 13, 15, 17, 21, 23 and 24. Further claims 2, 4, 6, 10, 14, 16, 18 and 22 would also not have been suggested by the applied prior art references for at least the respective dependence of these claims on allowable independent claims, as enumerated above, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-6, 9, 10, 12-18 and 21-24 under 35 U.S.C. §103(a) as being unpatentable over the combination of applied prior art references are respectfully requested.

The Office Action, in paragraph 3, rejects claims 7, 8, 19 and 20 under 35 U.S.C. §103(a) as being unpatentable over Moench and Seki. Applicant respectfully traverses this rejection.

The Office Action, while asserting that Moench teaches many of the features of the subject matter of the pending claims, concedes that Moench does not teach a sealing portion coated with a heat radiation material. The Office Action relies on Seki to overcome this deficiency in Moench. Seki teaches a reflective film on at least one of the sealing portions that has a reflectance larger than that of the material constituting the sealed portion. Seki does not disclose a heat radiation material which is higher in thermal conductivity than a material of the sealing portion. The purpose of the reflected film, as taught by Seki, is to reflect light radiating from the connection portion of the sealing portion and, therefore, the temperature increase of the connection portion during lamp operation can be suppressed. The

subject matter of the pending claims discloses a heat radiation material having a thermal conductivity higher than that of the material of the sealing portion, therefore, minimizing the increase in temperature. Thus, Seki cannot reasonably be considered to teach, or to have suggested, a heat radiation material which is higher in thermal conductivity than a material of the sealing portion.

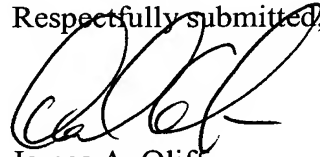
For at least the above reasons, any permissible combination of Moench and Seki cannot reasonably be considered to teach, or to have suggested, the combinations of all of the features recited in at least independent claims 7 and 19. Further, claims 8 and 20 would also not have been suggested by the applied prior art references for at least the respective dependence of these claims on allowable independent claims 7 and 19, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejections of claims 7, 8, 19 and 20 under 35 U.S.C. §103(a) as being unpatentable over the combination of applied prior art references are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-24 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Date: September 18, 2006

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